Clean Version of Pending Claims Under Consideration

13.   The method of claim 62 wherein the mismatch repair gene is *PMS2*.

14.   The method of claim 62 wherein the mismatch repair gene is human *PMS2*.

18.   The method of claim 14 wherein said mismatch repair gene comprises a truncation mutation.

19.   The method of claim 14 wherein said mismatch repair gene comprises a truncation mutation at codon 134 as shown in SEQ ID NO:1.

20.   The method of claim 19 wherein the truncation mutation is a thymidine at nucleotide 424 of wild-type *PMS2* as shown in SEQ ID NO:1.

29.   The hypermutable, nonhuman, transgenic animal of claim 60 comprising a protein which consists of the first 133 amino acids of human PMS2.

52.   The hypermutable, nonhuman, transgenic animal of claim 61 wherein the mismatch repair gene is *PMS2*.

53.   The hypermutable, nonhuman, transgenic animal of claim 61 wherein the mismatch repair gene is human *PMS2*.

58.   The hypermutable, nonhuman, transgenic animal of claim 61 wherein the dominant negative allele comprises a truncation mutation at codon 134 as shown in SEQ ID NO:1.

59.   The hypermutable, nonhuman, transgenic animal of claim 58 wherein the truncation mutation is a thymidine at nucleotide 424 of wild-type *PMS2* as shown in SEQ ID NO:1.

60.   A hypermutable, nonhuman, transgenic animal wherein at least 50% of the cells of said animal comprise a dominant negative allele of a mismatch repair gene.

61.   A hypermutable, nonhuman, transgenic animal produced by a process comprising introducing a polynucleotide comprising a sequence encoding a dominant negative allele of a mismatch repair gene into said animal, whereby said animal becomes hypermutable.

62.   A method of making a hypermutable, nonhuman, fertilized egg comprising introducing into said fertilized egg a polynucleotide comprising a sequence encoding a dominant negative allele of a mismatch repair gene, whereby said fertilized egg becomes hypermutable.

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